



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,201	10/12/2000	Stanislaw Czaja	LSI-002-PAP-1	9304
24319	7590	05/06/2004	EXAMINER	
LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 LEGAL MILPITAS, CA 95035			MOORE, IAN N	
			ART UNIT	PAPER NUMBER
			2661	8

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/687,201

Applicant(s)

CZAJA ET AL.

Examiner

Ian N Moore

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-22 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION*****Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1, 13, and 22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1,12, 21 of copending Application No. 09/687,199. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 13, and 22 of the instant application merely broaden the scope of the claim 1, 12, and 21 of the Patent application (09/687,199) by eliminating the elements and their functions of the claims. It has been held that the omission an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Drawings***

2. Figures 1, 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claims 7 and 13 are objected to because of the following informalities: Claims 7 and 13 recite acronym "T\_Add" (in claim 7-line 5, and claim 13-line 10) and "PSMM" (claim 7-line 8, and claim-13 line 8). A full meaning/expression of theses acronyms must be recited in these claims.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - The term "**different generations...**" recites in claim 1,13 and 22, which renders the claim indefinite. The term " different generations..." is not defined by the claim, and

Art Unit: 2661

it is unclear what are the different generations of CDMA. In particular, it is unclear whether the different generations mean the generation between 1<sup>st</sup> generation, 2<sup>nd</sup> generation, 2.5<sup>th</sup> generation, and/or 3<sup>rd</sup> generation. The specification does not clearly provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4-7, 9, 11-18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja (U.S. 6,567,666) in view of Ramakrishna (U.S. 6,233,455). The applied reference (i.e. Czaja'666) has a common inventor with the instant application with different assignee. In particular, the applied reference assignee is Infineon Technologies and the instant application assignee is LSI Logic Corporation.

**Regarding Claims 1 and 22**, Czaja'666 discloses a computer program on a general purpose computing device (see col. 8, lines 56 to col. 10, lines 33, **method/computational claims for the CDMA cellular radiophone system**) to execute a method of initiating a reverse link handoff (see col. 4, lines 675-67; **General handoff**) in a CDMA communication system (see FIG. 1, **CDMA IS-95 and IS-2000 Networks**) having a plurality of base

Art Unit: 2661

stations in communication (see **FIG. 12 BS1 (Base Station 1) 122 and BS2 123**) with at least one mobile station (see **FIG. 12, MS 124**),

wherein each base station transmits at least one associated and corresponding pilot channel that uniquely identifies the base station (see **col. 1, lines 35-39; note that each base station transmits pilot signals/PN codes for identification**), and

wherein the serving base station (see **FIG. 1, active base station B 121 in IS-95-B network**) and the target base station (see **FIG. 1, candidate base station A 141 in IS-2000 network**) operate in accordance to different generations of CDMA systems (see **FIG. 1, note that IS-95-B is 2G network and IS-2000 is 3G network**), and the method comprising the step of:

a) a first set of instructions for monitoring a first parameter obtained from the serving base station, wherein the first parameter that is associated with the serving base station (see **col. 5, lines 35-38; note that mobile unit measures/obtains pilot signal strength ( $E_c/I_o$ ) from active base station**);

b) a second set of instructions for monitoring a second parameter obtained from the target base station, wherein the second parameter, that is associated with the target base station (see **col. 5, lines 35-40; note that mobile unit measures/obtains pilot signal strength ( $E_c/I_o$ ) from candidate base station**);

c) a third set of instructions for determining if the first parameter is less than or equal to the second parameter (see **col. 5, lines 37-42, 55-60, col. 6, lines 6-13; note that each measurement is compared to the threshold. The threshold must be equal to acceptable signal strength (i.e. setting threshold value to at least existing signal strength of the**

**active BS). Also, determining step includes whether active BS signal strength is lesser or equal to the candidate BS signal strength (i.e. Candidate BS  $E_c/I_o$  is greater than active/BS threshold  $E_c/I_o$ ). Thus, comparing the measured results with the threshold means comparing the measured signal strength values to existing active BS signal strength in order to determine the signal strength for the handoff.)**

**d) returning to step (a) if the first parameter is not less than or equal to the second parameter (see col. 5, lines 37-52, col. 1, lines 40-43; note that when the measured active BS  $E_c/I_o$  is not less than or equal the candidate BS/threshold  $E_c/I_o$  (i.e. Candidate BS/threshold  $E_c/I_o$  is greater than active BS  $E_c/I_o$ ), then the mobile unit must continue to measure other neighbors sine the measured signal strength does not meet the requirement for the handoff); and**

**e) a fourth set of instructions for initiating a reverse link intergenerational hard handoff between the serving and target base stations (see col. 7, lines 43-60; a handoff between two generations of CDMA) if the first parameter is less than or equal to the second parameter (see col. 5, lines 52-55, see col. 7, lines 20-32, 43-47; note that when the active BS  $E_c/I_o$  is less than or equal to the candidate BS/threshold  $E_c/I_o$ , (i.e. candidate BS/threshold  $E_c/I_o$  is greater than the active BS  $E_c/I_o$ ), the handoff is initiated. Since the handoff is initiated by the mobile unit from the reverse link and performed by BS between intergeneration systems, it is a reverse link hard handoff.)**

Czaja'726 does not explicitly disclose c) determining if the first parameter is less than or equal to the sum of the second parameter and an offset; and d) initiating and performing

Art Unit: 2661

the selections and/or adjustments if the first parameter is less than or equal to the sum of the second parameter and the offset.

However, the above-mentioned claimed limitations are taught by Ramakrishna'455.

In particular, Ramakrishna'455 teaches

a) monitoring a first parameter obtained from the serving base station (see FIG. 1, BS within P1 and P2; see FIG. 2A, step 200, measuring pilot signal strength for active sets P1 and/or P2; see col. 5, lines 6-22; see col. 1, lines 60-67);

b) monitoring a second parameter obtained from the target base station (see FIG. 2A, step 200, measuring pilot signal strength for new active set P3; see col. 5, lines 6-22);

c) determining if the first parameter is less than or equal to the sum of the second parameter and an offset (see FIG. 3A, step 314, see col. 6, lines 59 to col. 7, lines 6;  $p1 - p3 \leq \Delta 3$ , that is,  $p1 \leq p3 + \Delta$ ; note that the difference of signal strength determined by comparing to delta (i.e. determining if P1 is less than equal to the sum of P3 and delta)),

d) initiating/performing a handoff between serving and target base station if the first parameter is less than or equal to the sum of the second parameter and the offset (see FIG. 3B, steps 346 and 348, see col. 7, lines 16-55; note that when the signal strength of P1 is less than or equal to the P3 and the delta, the handoff occurs/initiates between P1 BS and P3 BS by sending Handoff Direction Message (HDM) or BSAO (base station acknowledgement order) message.)

In view of this, having the system of Czaja'726 and then given the teaching of Ramakrishna'455, it would have been obvious to one having ordinary skill in the art at the



Art Unit: 2661

time the invention was made to modify the system of Czaja'726, by providing an offset as a variable while determining the candidate base station to perform handoff, as taught by Ramakrishna'455. The motivation to combine is to obtain the advantages/benefits taught by Ramakrishna'455 since Ramakrishna'455 states at col. 3, line 49-54 that such modification would increase the network efficiency by assisting handoff between a mobile and base-stations while maintaining low dropped call probabilities and without adversely affecting frame error rates.

**Regarding Claim 13**, Czaja'726 discloses an apparatus for initiating a reverse link handoff (see col. 4, lines 675-67; **General handoff**) in a CDMA communication system (see **FIG. 1, CDMA IS-95 and IS-2000 Networks**) having a plurality of base stations in communication (see **FIG. 12 BS1 (Base Station 1) 122 and BS2 123**) with at least one mobile station (see **FIG. 12, MS 124**),

wherein each base station transmits at least one associated and corresponding pilot channel that uniquely identifies the base station (see col. 1, lines 35-39; **note that each base station transmits pilot signals/PN codes for identification**), and

wherein the serving base station (see **FIG. 1, active base station B 121 in IS-95-B network**) and the target base station (see **FIG. 1, candidate base station A 141 in IS-2000 network**) operate in accordance to different generations of CDMA systems (see **FIG. 1, note that IS-95-B is 2G network and IS-2000 is 3G network**), comprising:

a) means for sending a PSMM to the serving base station and adding the target base station to an active set when a first parameter, associated with the target base station is

greater than a T -Add threshold parameter (see col. 4, lines 30-61; col. 7, lines 39-52; note that mobile unit sends PSMM to active base station when Ec/Io parameter of the stored/newly-added candidate BS is larger than T\_ADD threshold); and

b) means for initiating a reverse link intergenerational hard handoff, wherein the hard handoff initiation means is responsive to the serving base station (see col. 7, lines 23-26; note that the handoff is triggered when the active BS signal power is determined to be too weak, and the handoff is performed between intergeneration Base station with different frequency operation, thus, the hard handoff), and

wherein the hard handoff initiation means initiates a reverse link intergenerational hard handoff when the serving base station transmits an intergenerational handoff direction message to the mobile station (see col. 5, lines 1-12, col. 7, lines 42-55; note that active base station transmits the general handoff direction message, GHDM, to the mobile station) and when a second parameter associated with the serving base station (see col. 5, lines 37-52, col. 1, lines 40-43; the measured Serving BS Ec/Io parameter/value) is less than or equal to the first parameter (see col. 5, lines 35-40; measured Candidate BS Ec/Io; see col. 5, lines 37-42, 55-60, col. 6, lines 6-13; note that each measurement is compared to the threshold. The threshold must be equal to acceptable signal strength (i.e. setting threshold value to at least existing signal strength of the active BS). Also, determining step includes whether active BS signal strength is lesser or equal to the candidate BS signal strength (i.e. Candidate BS Ec/Io is greater than active/BS threshold Ec/Io). Thus, comparing the measured results with the threshold means comparing the

**measured signal strength values to existing active BS signal strength in order to determine the signal strength for the handoff.)**

Czaja'726 does not explicitly disclose a second parameter is less than or equal to a sum of the first parameter and an offset.

However, the above-mentioned claimed limitations are taught by Ramakrishna'455. In particular, Ramakrishna'455 teaches means for initiating a handoff between serving see **FIG. 1, BS within P1 and P2)** and target base station (see **FIG. 2A, step 200, measuring pilot signal strength for new active set P3)** wherein the a second parameter is less than or equal to a sum of the first parameter and an offset (see **FIG. 3A, step 314, see col. 6, lines 59 to col. 7, lines 6;  $p1 - p3 \leq \Delta$  3, that is,  $p1 \leq p3 + \Delta$ ; note that difference of signal strength determined by comparing to delta (i.e. determining if P1 is less than equal to the sum of P3 and delta Also, see FIG. 3B, steps 346 and 348, see col. 7, lines 16-55; note that when the signal strength of P1 is less than or equal to the P3 and the delta. The handoff occurs/initiates between P1 BS and P3 BS by sending Handoff Direction Message (HDM) or BSAO (base station acknowledgement order) message.)**

In view of this, having the system of Czaja'726 and then given the teaching of Ramakrishna'455, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Czaja'726, by providing an offset as a variable while determining the candidate base station to perform handoff, as taught by Ramakrishna'455. The motivation to combine is to obtain the advantages/benefits taught by Ramakrishna'455 since Ramakrishna'455 states at col. 3, line 49-54 that such modification would increase the network efficiency by assisting handoff between a mobile and base-

Art Unit: 2661

stations while maintaining low dropped call probabilities and without adversely affecting frame error rates.

**Regarding claims 2 and 16**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claims 1 and 13 as described above. Since Czaja'726 does not utilize the offset/delta/adjustment value during determining process, **it is clear that the value is zero**. Ramakrishna'455 further teaches that **the offset is arbitrary value set by the system operator (see col. 6, lines 63-65)**. Thus, the combined system of Czaja'726 and Ramakrishna'455 further teaches the offset is zero.

In view of this, having the system of Czaja'726 and then given the teaching of Ramakrishna'455, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Czaja'726, by utilizing zero offset value, as taught by Ramakrishna'455, for the same motivation as stated above in Claims 1 and 13.

**Regarding claim 3**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claims 1 and 13 as described above. Ramakrishna'455 further teaches wherein the offset is based on a Quality of Service (QoS) parameter (see col. 3, lines 27-45, see col. 5, lines 25-28; **note that delta value is the quality value set by network operator in order to select the optimal handoff by utilizing the quality path; thus, the delta value is set according to the quality/grade of service for determining the optimal handoff**).

Art Unit: 2661

In view of this, having the system of Czaja'726 and then given the teaching of Ramakrishna'455, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Czaja'726, by setting the delta value based on quality/grade, as taught by Ramakrishna'455, for the same motivation as stated above in Claims 1.

**Regarding claim 4**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claims 1 and 12 as described above. Czaja'666 discloses Frame Error Rate (FER) parameter (see FIG. 10-11; note that FER parameter is computed/compared between two system generations; see col. 8, lines 4-10. Ramakrishna'455 further teaches wherein the offset is based on a Frame Error Rate (FER) parameter (see col. 3, lines 27-45, see col. 5, lines 25-28; **note that delta value is the quality value set by network operator according to FER in order to select the optimal handoff by utilizing/maintaining the quality path; thus, the delta value is set according to FER for determining the optimal handoff.**)

In view of this, having the system of Czaja'726 and then given the teaching of Ramakrishna'455, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Czaja'726, by utilizing the delta value according to FER, as taught by Ramakrishna'455, for the same motivation as stated above in Claims 1.

**Regarding claim 5**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claim 1 as described above. Czaja'666 further teaches wherein the first parameter is a first Ec/Io value associated with serving base station (**see col. 5, lines 37-52, col. 1, lines 40-43; the measuring the Serving BS Ec/Io parameter/value**).

**Regarding claim 6**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claim 1 as described above. Czaja'666 further teaches wherein the second parameter is a second Ec/Io value associated with the target base station (**see col. 5, lines 35-40; the measuring candidate/threshold BS Ec/Io parameter/value**).

**Regarding claim 14**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claim 1 as described above. Czaja'666 further teaches wherein the first parameter is a target base station Ec/Io (**see col. 5, lines 35-40; the measuring candidate/threshold BS Ec/Io parameter/value**).

**Regarding claim 15**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claim 1 as described above. Czaja'666 further teaches wherein the second parameter is a servicing base station Ec/Io (**see col. 5, lines 37-52, col. 1, lines 40-43; the measuring Serving BS Ec/Io parameter/value**).

**Regarding claims 8 and 17** the combined system of Czaja'726 and Chheda'738 discloses all aspects of the claimed invention set forth in the rejection of Claims 1 and 13 as described above, and Czaja'726 further teaches wherein the step (e) of initiating a reverse link intergenerational hard handoff is autonomously performed by the mobile station (**see col. 7, lines 39-60; note that the intergenerational handoff is automatically initiated/performed by the mobile unit from the reverse link and responded/performed by BS (i.e. hard handoff).**)

6. Claims 9-12 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system of Czaja'726 and Ramakrishna'455 as applied to claims 1 and 13 above, and further in view of well established teaching in art.

**Regarding claims 9, 11, 18 and 20**, the combined system of Czaja'726 and Ramakrishna'455 discloses all aspects of the claimed invention set forth in the rejection of Claims 1 and 13 as described above, and Czaja'726 further teaches wherein the handoff is an intergenerational handoff.

Neither Czaja'726 nor Chheda'738 explicitly discloses wherein the handoff is an intergenerational soft handoff comprising a forward link soft handoff and a reverse link hard handoff, and wherein the handoff is an intergenerational hard handoff comprising a forward link hard handoff and a reverse link hard handoff.

However, the above-mentioned claimed limitations are well known in the art of intergenerational handoff. In particular, the handoff is an intergenerational soft handoff

comprising a forward link soft handoff and a reverse link hard handoff, and the handoff is an intergenerational hard handoff comprising a forward link hard handoff and a reverse link hard handoff. Note that Czaja'726 teaches a mobile unit initiating a handoff by utilizing the signal strength, and base station instructs the mobile to handoff. In addition, the mobile unit performs additional requirements during a handoff and before the completion. Also, it is well known in the art of CDMA that either the base station and/or the mobile unit can perform the handoff (i.e. intergenerational soft handoff and intergenerational hard handoff).

In view of this, having the combined system of Czaja'666 and Ramakrishna'455, then given the well established teaching of the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Czaja'726 and Ramakrishna'455, by providing a various of intergeneration handoffs, as taught by well established teaching in the art. The motivation to combine is to obtain the advantages/benefits taught by well established teaching in the art that since Czaja'726 states at see col. 3, lines 1-5, 21-25 that such modification would provide 3G system to have backward compatibility with the 2G system at the signaling call processing level thereby, avoiding the handoff disadvantages.

**Regarding claims 10, 12, 19 and 21** the combined system of Czaja'726, Chheda'738 and well established teaching in art discloses all aspects of the claimed invention set forth in the rejection of Claims 1,9,11,13,18 and 20 as described above, and Czaja'726 further teaches wherein the mobile station autonomously performs the handoff (see col. 7, lines 39-60; note that the handoff is automatically performed by the mobile unit).



***Allowable Subject Matter***


7. **Claim 7** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 703-605-1531. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM  
4/29/04

  
RICKY NGO  
PRIMARY EXAMINER